ABSTRACT

A method and system for backing up and restoring a system that cannot reboot in an automatic and efficient manner. A backup component copies and stores the state that defines the configuration of the computer system by obtaining and preserving the underlying description of the system. backed-up state information includes the disk structure and layout. Also backed up is the information specifying what to execute during restore phases, including programs to copy and execute, any error handling, and any special driver files to load. A restore component operates in a first phase to use the backed-up configuration information to compare with the current state of a new system, and the disk and volume state are restored according to the saved information. Once the underlying system state is restored, an environment is created by copying a set of files required to run the programs that will restore the remainder of the data. A second restore phase configures the environment for launching a restore program by detecting and installing drivers and support for devices installed on the system. The restore program or programs are then run according to the instructions that were saved therewith during the backup phase, to restore the remainder of the data.